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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,840	02/10/2004	Carey J. Naquin	1391-46000	1645
23505	7590	06/04/2007		
CONLEY ROSE, P.C. David A. Rose P. O. BOX 3267 HOUSTON, TX 77253-3267			EXAMINER BOMAR, THOMAS S	
			ART UNIT 3672	PAPER NUMBER
			MAIL DATE 06/04/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/775,840	Applicant(s) NAQUIN ET AL.	
	Examiner Shane Bomar	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33, 37-39 and 41-59 is/are pending in the application.
- 4a) Of the above claim(s) 58 and 59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 13-26, 32, 33, 37-39, 41-46 and 51-54 is/are rejected.
- 7) ☒ Claim(s) 8-12, 27-31, 47-50 and 55-57 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims 2-7, 17, 22-33, 37-39, 43-46, and 51-54 is withdrawn in view of the newly discovered reference(s) to Nelson et al. Rejections based on the newly cited reference(s) follow. Accordingly, the Finality of the previous Office Action is withdrawn.

Claim Objections

2. Claim 19 is objected to because of the following informalities: it appears that the recitation of “were” should be --where--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-7, 13-26, 32, 33, 37-39, 41-46, and 51-54 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,260,020 to Nelson et al.

Regarding claims 1, 13, 15, 18, 19, 41, and 42, Nelson et al disclose a flowbore fluid temperature control system and method comprising: a control system body 10 comprising a flowbore 13 extending through the length of the control system body and comprising an inlet at element 14 and an outlet at element 12 such that all flowbore fluid entering the control system body inlet exits the control system outlet; a valve mechanism 11/16 within the control system body that controls the flow of flowbore fluid through the flowbore while maintaining the flowbore fluid in the control system body flowbore; an actuator 21 that adjusts the valve

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mechanism (for all of the above, see Figs. 1 and 2); an operating system at the surface that operates the actuator and controls the flowbore fluid pressure (see col. 3, lines 55-62); and the temperature of the flowbore fluid being inherently controlled by controlling the pressure drop of the flowbore fluid across the valve mechanism due to the pressure differential between piston faces 19 and 20 (see col. 4, lines 1-11). Since Nelson et al discloses the same structural limitations of this claim and operates in the same manner, the temperature of the fluid as it flows from the inlet, through the relatively smaller ports 15 and into the smaller (diametrically) annulus, and then out of the relatively larger outlet at 12, the temperature of the fluid must change due to notoriously known fluid dynamic principles (i.e., the fluid passes from a large diameter inlet, to a small diameter port and annulus, and then to a larger diameter outlet in a substantially similar fashion to that of the Applicant's invention).

Regarding claims 2-7, 22-26, 32, 37, 38, 43-46, and 51-54, the valve mechanism comprises a multi-position sleeve valve, which further comprises: a valve sleeve 11 within the flowbore forming an annulus 13 between the outside of the valve sleeve and the inside of the body 10; the valve sleeve comprising flow ports 15 allowing fluid flow through the valve sleeve and into the annulus; the valve sleeve further comprises an outer threaded portion that threadingly engages an inner threaded portion of the flowbore; a seal 18 prevents fluid flow across the seal between the outside of the piston and the inside of the valve sleeve; and a piston 16 slidably engages the inside of the valve sleeve, the position of the piston within the valve sleeve controlled by the amount of pressure against spring 21 to control the fluid flow through the flow ports (Figs. 1 and 2; col. 3, lines 34-68).

Regarding claims 14 and 33, the operating system operates the actuator mechanism by applying fluid pressure to the piston 16 to position the valve mechanism and selectively control the amount of fluid flow through the valve mechanism (i.e., the piston first blocks flow through the mechanism, then allows flow through the mechanism until it impacts the unlabeled shoulder in the valve sleeve 11; Fig. 2).

Regarding claims 16, 17, 20, 21, and 39, the valve mechanism comprises a first part that is a single-position sleeve 11 adapted to create a flow restriction due to the ports 15 that are smaller in overall diameter than the inlet, and the valve mechanism comprises a second part 16 that is the multi-position piston 16 (Figs. 1 and 2).

Allowable Subject Matter

5. Claims 8-12, 27-31, 47-50, and 55-57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 1 and 41 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is 571-272-7026. The examiner can normally be reached on Monday - Thursday from 6:30am to 5:00pm.

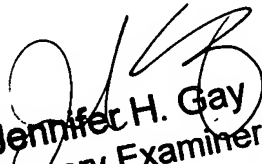
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Bagnell
Supervisory Patent Examiner
Art Unit 3672

tsb

May 30, 2007


Jennifer H. Gay
Primary Examiner